

Horizon™

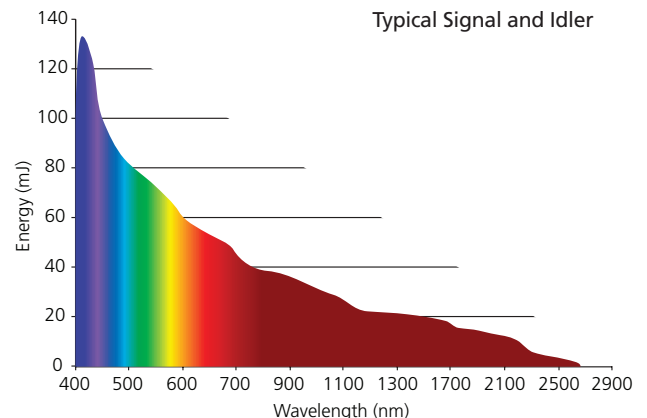
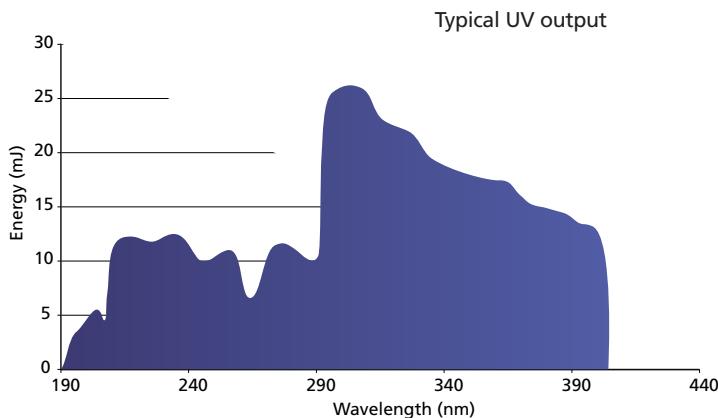


Horizon Series OPO

The new Horizon mid-band OPO offers unmatched performance. Its intelligently integrated optical design delivers the highest output powers available over an extensive tuning range (192-2750nm). Fully automated with precision scanning for true hands-free operation, Horizon is a robust system delivering optimal performance – all day, every day.

With the highest conversion efficiency available from any mid-band OPO, Horizon gives you unprecedented advantages: outstanding beam quality, excellent beam pointing stability and the option for wavelength access extended into the vacuum ultraviolet. With crystals and Pellin Broca prisms mounted directly to ultra-high resolution stepper motors, Horizon has been engineered for optimal stability and tuning reproducibility at all wavelengths.

Horizon performance with PL 8000 Pump



Fully Integrated OPO
Fully Integrated OPO
Fully Integrated OPO
Fully Integrated OPO

Features and Benefits

Extended tunability from 192 nm to 2750 nm

More than twice the energy

Linewidths down to $< 3 \text{ cm}^{-1}$

Excellent beam quality and low divergence in both axes

Fully automated for precision scanning and optimal performance - Windows 7 platform

All encompassing optical design integrated into a single monolithic platform for ease of use and convenience

Coated and temperature stabilized crystals enclosed in a secure housing for optimal lifetime and reliability

Continuum®
The High Energy Laser Company™

Horizon Energy Specifications

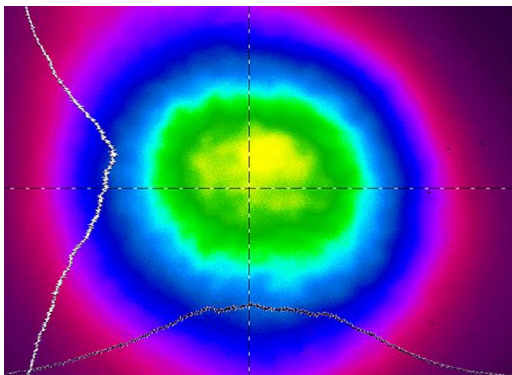
Tuning Range* (nm)		400-2750	192-400
Pump Laser		Energy at Peak (mJ) 425nm	Energy at Peak (mJ) 325nm
Pump Model	OPO Pump Energy (mJ) at 355nm		
Horizon I pumped with 200mJ or less			
SL I-10	100	30	6
SL II-10	160	50	10
Horizon II pumped with 200mJ or more			
SL EX	220	80	15
PL 8000	290	110	20

Horizon Specifications

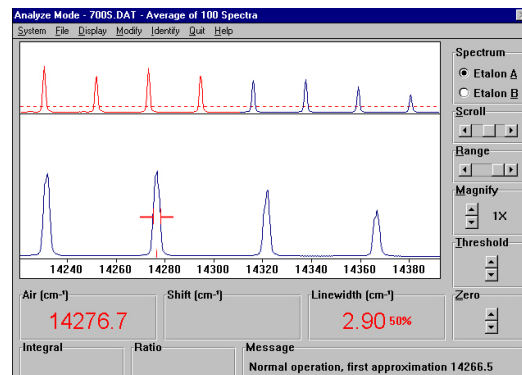
Description	SL I, II, EX	PL 8000
Pulsewidth (nsec)	3-5	3-7
Pointing Stability (μ rad)	$<\pm 100$	$<\pm 100$
Linewidth (cm^{-1})		
Seeded		2-6
Unseeded		3-7
Energy Stability (% , 99% of shots)		$<\pm 10$
Divergence (mrad, FWHM)		<2 (both axes)
Beam Diameter (mm, near field)		4-7
Beam Roundness (% , near field)		>85
Polarization (%)		
Signal Horizontal		>99
Idler Horizontal		>99

Notes:

As a part of our continuous improvement program, all specifications are subject to change without notice.



Horizon Signal beam quality, near field
430nm at 1.5m



Horizon linewidth scan

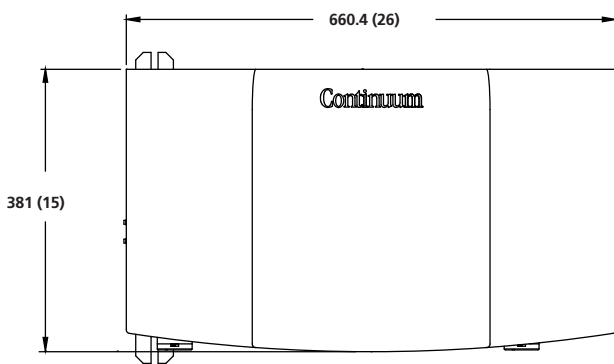
Horizon Package Dimensions

Size	LxWxH	660.4 x 381 x 346.7 mm (26 x 15 x 12.33") H ±12 mm/0.5"
Weight		30.8 kg (68 lbs)

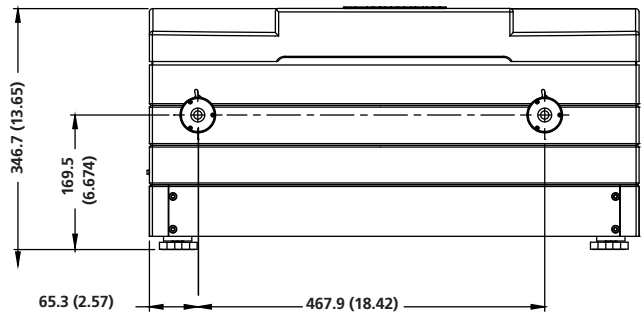
Horizon Physical Layout

All dimensions are in mm (inches)

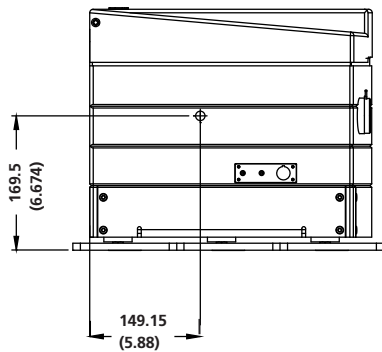
Top View



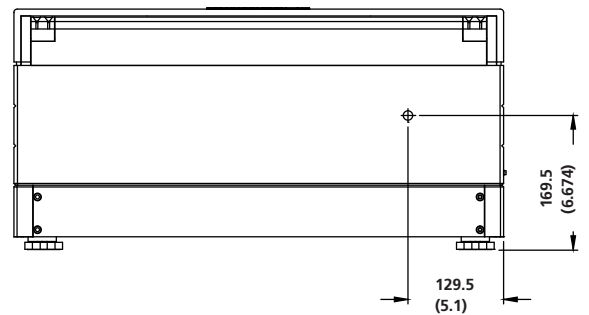
Output View



Side View



Back View



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